

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A ~~computer implemented recording~~ method of recording data to a computer readable storage medium comprising:

~~inputting~~ identifying time-series information;

carrying out data compression on the time-series information including, generating management information and additional information, said management information for use in a decoding/reproduction process for decoding and reproducing said time-series information, said additional information being supplemental information regarding said time-series information; and

recording said time-series information once compressed, said management information, and said additional information onto ~~[[a]]~~ the computer readable storage recording medium,

said management information and said additional information being recorded in at least one of logical and physical positions next to each other in respective predetermined decoding/reproduction units

Claim 2 (Original): The recording method according to claim 1 wherein,

data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, includes a plurality of said decoding/reproduction units of said time-series information; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 3 (Previously Presented): The recording method according to claim 1 wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 4 (Original): The recording method according to claim 2 whereby additional information for data of said predetermined-interval decoding/reproduction unit is recorded by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 5 (Currently Amended): The recording method according to claim 2 wherein[[:]],

data of said read/write unit comprises a plurality of packets; and

additional information for data of said predetermined-interval decoding/reproduction unit is recorded in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 6 (Currently Amended): The recording method according to claim 2 wherein[[:]],

data of said read/write unit comprises a plurality of packets;

a specific packet is selected among said packets of said time-series information completing said data compression; and

additional information for data of said predetermined-interval decoding/reproduction unit is recorded at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 7 (Previously Presented): The recording method according to claim 1 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 8 (Previously Presented): A recording method according to claim 1 wherein said additional information includes information on a condition in which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 9 (Previously Presented): The recording method according to claim 1 wherein, said time-series information is video information;
data of said decoding/reproduction unit is information of a field unit or a frame unit;
and
said data compression uses a correlation with data of said decoding/reproduction unit.

Claim 10 (Currently Amended): A ~~computer implemented~~ recording apparatus comprising:
a data ~~inputting~~ input means ~~device~~ for ~~inputting~~ receiving time-series information;
a data compression ~~means~~ device for carrying out data compression on the time-series information;

a management-information generation ~~means~~ device for generating management information for use in a decoding/reproduction process for decoding and reproducing said time-series information;

an additional-information generation ~~means~~ device for generating additional information that is supplemental information regarding said time-series information; and

a recording control ~~means~~ device for recording said time-series information once compressed on a recording medium, and recording said management information generated by said management-information generation ~~means~~ device and said additional information by said additional-information generation ~~means~~ device next to each other on said recording medium in at least one of logical and physical positions in each of predetermined decoding/reproduction units.

Claim 11 (Original): The recording apparatus according to claim 10 wherein, said recording control ~~means~~ device generates data including a plurality of said decoding/reproduction units of said time-series information as data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium; and
the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 12 (Previously Presented): The recording apparatus according to claim 10 wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 13 (Original): The recording apparatus according to claim 11 wherein said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 14 (Currently Amended): The recording apparatus according to claim 11 wherein[[[:]],
data of said read/write unit comprises a plurality of packets; and
said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 15 (Currently Amended): The recording apparatus according to claim 11 wherein[[[:]],
data of said read/write unit comprises a plurality of packets;
a specific packet is selected among said packets of said time-series information completing said data compression; and
said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 16 (Previously Presented): The recording apparatus according to claim 10 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 17 (Previously Presented): The recording apparatus according to claim 10 wherein said additional information includes information on a condition in which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 18 (Currently Amended): The recording apparatus according to claim 10 wherein[[;]],

said time-series information is video information;

data of said decoding/reproduction unit is information of a field unit or a frame unit;

and

said data compression uses a correlation with data of said decoding/reproduction unit.

Claims 19-29 (Canceled).

Claim 30 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, compressed time-series information, management information for a decoding/reproduction process to data included in each of decoding/reproduction units of said time-series information, and additional information that is supplemental information regarding said time series information, said management information and said additional information being recorded next to one another in at least one of logical and physical positions, said apparatus comprising:

a read ~~means~~ device for reading out said compressed time-series information and said additional information from said recording medium;

a separation ~~means~~ device for separating said compressed time-series information and said additional information, which have been read out by said read ~~means~~ device;

a decompression ~~means~~ device for decompressing said compressed time-series information separated by said separation ~~means~~ device;

a first reproduction/output ~~means~~ device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a second reproduction/output ~~means~~ device for reproducing and outputting said additional information output by said separation ~~means~~ device synchronously with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management information for said decoding/reproduction process.

Claim 31 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, ~~said reproduction apparatus comprising:~~ compressed time-series information, management information for a decoding/reproduction process to data included in each of decoding/reproduction units of said time-series information, and additional information that is supplemental information regarding said time series information, said management information and said additional information being recorded next to one another in at least one of logical and physical positions, said apparatus comprising:

a read ~~means~~ device for reading out said compressed time-series information and said additional information from said recording medium;

a separation ~~means~~ device for separating said compressed time-series information and said additional information, which have been read out by said read ~~means~~ device;

a decompression ~~means~~ device for decompressing said compressed time-series information separated by said separation ~~means~~ device;

a reproduction/output ~~means~~ device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a reproduction/control ~~means~~ device for reproducing said additional information output by said separation ~~means~~ device in synchronization with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management information for said decoding/reproduction process, and controlling data of a corresponding one of said decoding/reproduction units on the basis of said generated additional information.

Claim 32 (Currently Amended): An image pickup apparatus comprising:

an image pickup device;

a data compression ~~means~~ device for carrying out a data compression process on image data output by said image pickup device;

a time-management information generation ~~means~~ device for generating time-management information and additional information, said time-management information for use in a decoding/reproduction process for said image data, said additional information being supplemental information regarding said image data; and

a recording control ~~means~~ device for recording said image data once compressed on a recording medium, and recording said management information generated by said management information generation ~~means~~ device and said additional information by said additional-information generation ~~means~~ device next to each other on said recording medium

in at least one of logical and physical positions in each of predetermined decoding/reproduction units.

Claim 33 (Currently Amended): The image pickup apparatus according to claim 32 wherein,

said recording control ~~means~~ device generates data including a plurality of said decoding/reproduction units of said ~~video information~~ image data as data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 34 (Original): The image pickup apparatus according to claim 32 wherein said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 35 (Currently Amended): The image pickup apparatus according to claim 32 wherein[[:]],

data of said read/write unit comprises a plurality of packets; and

said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 36 (Currently Amended): The image pickup apparatus according to claim 32 wherein[[:]],

data of said read/write unit comprises a plurality of packets;

a specific packet is selected among said packets of said compressed time-series information; and

said recording control ~~means~~ device records additional information for data of said predetermined-interval decoding/reproduction unit at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 37 (Currently Amended): The image pickup apparatus according to claim 32 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said ~~video information~~ image data is acquired.

Claim 38 (Original): The image pickup apparatus according to claim 32 wherein said additional information includes at least information on a condition in which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 39 (Currently Amended): The image pickup apparatus according to claim 32 wherein[[:]],

data of said decoding/reproduction unit is information of a field unit or a frame unit; and

said data compression process uses a correlation with data of said decoding/reproduction unit.

Claim 40 (Previously Presented): The recording method according to claim 1, wherein a data size of each additional information is constant.

Claim 41 (Previously Presented): The recording method according to claim 1, wherein said additional information follows said management-information in a logical position.

Claim 42 (Previously Presented): The recording method according to claim 1, wherein said additional information includes time information of said time-series information.

Claim 43 (Previously Presented): The recording method according to claim 1, wherein said additional information includes condition information of said time-series information.

Claim 44 (Previously Presented): The recording apparatus according to claim 10, wherein a data size of each additional information is constant.

Claim 45 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information follows said management-information in a logical position.

Claim 46 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes time information of said time-series information.

Claim 47 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes condition information of said time-series information being generated.

Claim 48 (Previously Presented): The image pickup apparatus according to claim 32, wherein a data size of each additional information is constant.

Claim 49 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information follows said management-information in a logical position.

Claim 50 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes time information of said image data being generated by said image pickup device.

Claim 51 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes condition information of said image data being generated by said image pickup device.